



# SEAD

SUPER-EFFICIENT EQUIPMENT AND  
APPLIANCE DEPLOYMENT INITIATIVE

Governments Working Together to Save Energy.

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## The Super-efficient Equipment and Appliance Deployment (SEAD) Initiative

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An Initiative of the Clean Energy Ministerial (CEM) and a task of the  
International Partnership for Energy Efficiency Cooperation (IPEEC)

[www.superefficient.org](http://www.superefficient.org)



**CLEAN ENERGY**  
MINISTERIAL

Accelerating Transition to Clean Energy Technologies



International  
Partnership for  
Energy Efficiency  
Cooperation

# Overview

- ⇒ Teaser video
- ⇒ Introduce the major work programs of the SEAD initiative
- ⇒ Highlight potential China-SEAD activities
- ⇒ G20 Energy Efficiency Leading Programme

# Webinar on U.S. Standards Program: October 28

- Outcome of 2015 US-China Energy Efficiency Forum
- Webinar will the requirements (general rules) for testing these products and the requirements for submitting compliance certification reports
- Ask questions and get answers directly from DOE



# A Global Initiative: SEAD governments work together to save energy



★ China is an observer of the SEAD Initiative

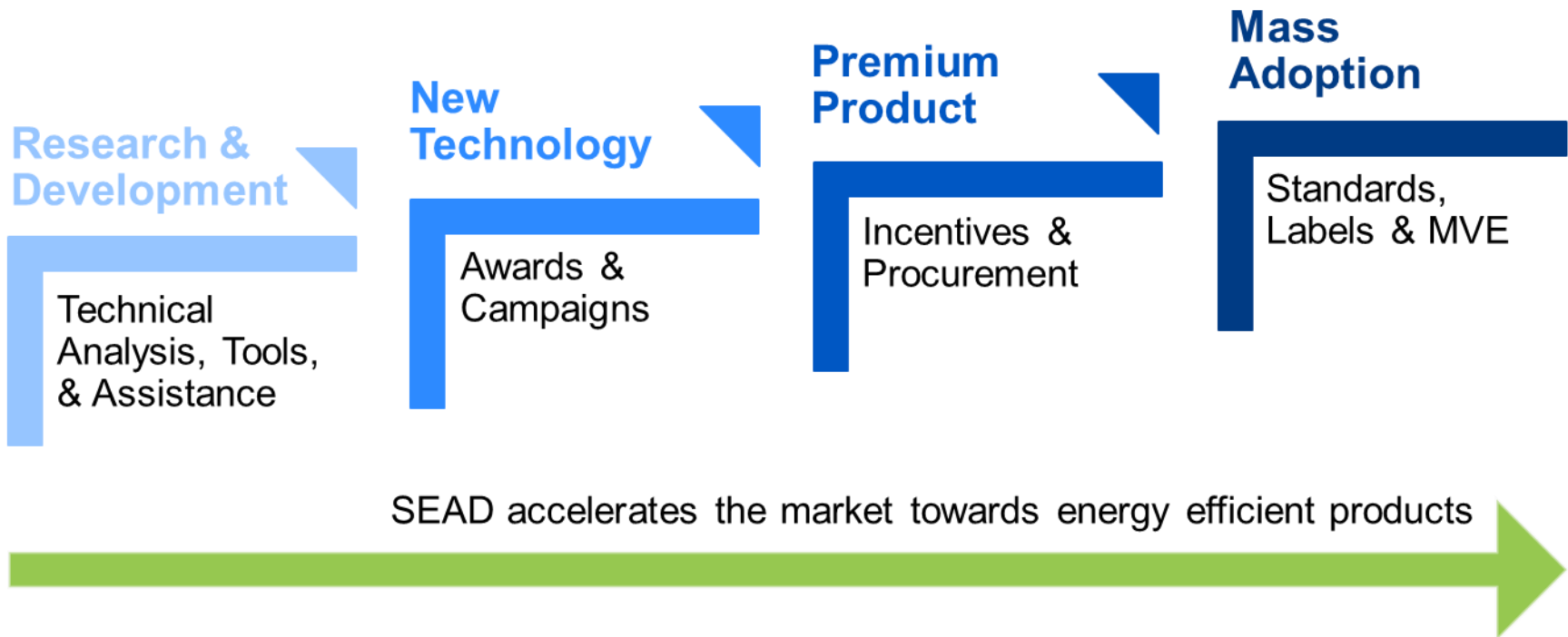


## Foster Global Collaboration & Partnership

**SEAD**  
increases  
visibility of  
energy  
efficiency at  
the highest  
levels



# Strengthen Product Energy Efficiency Policies



# Using Complementary Strategies

**Research &  
Analysis**



**Implementation  
& Training**

**Dialogue &  
Collaboration**

## Key Program Strategies

### Research & Analysis

Research  
Projects

Tool  
Development

Technical  
analysis

### Implementation & Training

Running Awards  
& Campaigns

Workshops

Trainings

### Dialogue & Collaboration

SEAD Policy  
Exchange  
Forum

Government &  
Initiative  
Collaborations

Conferences



# China & SEAD

- Test laboratory benchmarking for TVs (2012)
- Global winner electric motor efficiency medal  
2014: Nanyang Explosion Protection Group  
(南阳防爆集团)

Representatives from  
Nanyang Explosion  
Protection Group (南阳防  
爆集团) receive SEAD  
Global Efficiency Medal  
for Electric Motors from  
Minister Wan Gang at  
CEM6 in Mexico (2015)



# China & SEAD

- Test laboratory benchmarking for TVs (2012)
- Global winner electric motor efficiency medal  
2014: Nanyang Explosion Protection Group  
(南阳防爆集团)
- Regional winner lighting medal 2015:  
Xiamen Yankon Energetic Lighting Company,  
Limited
- CNIS presented new China Energy Label  
(CEL) with QR code at workshop hosted by  
IEA and SEAD (2015)

# Potential activities with SEAD

## Lighting



- SEAD Global Efficiency Medal for Industrial & Outdoor Lighting
- SEAD Street Lighting tool
- CEM Global Lighting Challenge



## Space Cooling

- CEM Advanced Cooling Campaign



## International Platform for Knowledge Sharing

- SEAD Policy Exchange Forum (SPEX)
- Analysis
- Support G20 Energy Efficiency Leading Program

# SEAD Industrial and Outdoor Lighting Award

- Launched at CEM7.
- Nominations opened September 12
- International winners will be recognized in award ceremony at CEM8 in Beijing
- By joining SEAD, China could oversee its own award region; current award regions include Europe, India, and North America





# SEAD Awards for industrial and outdoor lighting products

**Add China as an award region!**

Category	Classes	Regional Awards				INTERNATIONAL AWARDS
		CHINA	EUROPE	INDIA	NORTH AMERICA	
High-Bay and Low-Bay Luminaires	2500 to <15,000 lumens 2700 to <3500K CCT	•	•	•	•	•
	2500 to <15,000 lumens 3500 to <5000K CCT	•	•	•	•	•
	2500 to <15,000 lumens 5000 to 6500K CCT	•	•	•	•	•
	≥15,000 lumens 2700 to <3500K CCT	•	•	•	•	•
	≥15,000 lumens 3500 to <5000K CCT	•	•	•	•	•
	≥15,000 lumens 5000 to 6500K CCT	•	•	•	•	•
Street Lighting Luminaires	2500 to <10,000 lumens 2700 to <3500K CCT	•	•	•	•	•
	2500 to <10,000 lumens 3500 to <5000K CCT	•	•	•	•	•
	2500 to <10,000 lumens 5000 to 6500K CCT	•	•	•	•	•
	≥10,000 lumens 2700 to <3500K CCT	•	•	•	•	•
	≥10,000 lumens 3500 to <5000K CCT	•	•	•	•	•
	≥10,000 lumens 5000 to 6500K CCT	•	•	•	•	•

# SEAD Street Lighting Procurement

- New structure of SEAD Lighting Awards enables **linkages with procurement** of products that meet minimum criteria
  - SEAD is doing outreach to lighting purchasers to raise awareness and so they **consider purchasing award-winning products**
- 
- SEAD Street lighting tool **addresses barriers to adoption** of efficient street lighting
  - **Free software** for analyzing energy use, light quality, and lifecycle costs for roadway lighting fixtures
  - Download tool and user guides: [www.superefficient.org/sltool](http://www.superefficient.org/sltool)



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A graphic of a lightbulb with several blue dots above it, representing light or energy.

# GLOBAL LIGHTING CHALLENGE

*A Clean Energy Ministerial Campaign*

## A campaign to Deploy 10 Billion High-efficiency Bulbs

- Increased participation among Chinese agencies could provide:
- Stronger engagement with local manufacturers, retailers, and other stakeholders to recruit commitments to the GLC that ensure product performance and quality
- More opportunities to highlight Chinese lighting private sector
- Deeper GLC Working Group participation (monthly calls and requests for feedback on GLC materials)

**Through MOST, China has endorsed the GLC and committed to domestic sales of 5 billion products by the end of 2017, with an additional export commitment expected to be announced at CEM7**

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# CEM Advanced Cooling (AC) Campaign



## Concept

Challenge governments and industry to develop and deploy at scale super-efficient, smart, climate friendly and affordable cooling technologies.



## Rationale

Improving average efficiency of air conditioners sold in 2030 by 30% could reduce emissions by up to 25 billion tons of CO<sub>2</sub> & reduce peak electricity demand by up to 340-790 GW.



## Plan

The campaign launched at the 7th Clean Energy Ministerial, as a cooperative effort between endorsing national and subnational governments, companies, and organizations.

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## International Platform for Knowledge Sharing



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- Part of G20 Energy Efficiency Leading Program



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# SEAD Policy Exchange Forum (SPEx)



# G20 Energy Efficiency Leading Program

- SEAD is a work stream under the EELP
- First EELP SPEx Webinar: October 27
  - Role of Appliance Efficiency Programmes in Intended Nationally Determined Contributions
  - SEAD Policy Exchange Forum
  - 12:00 - 14:00 UTC
- In-person workshop to be hosted by IEA 4E, November 14-15



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Thank you!



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# Appendix

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## Research & Analysis

Research  
Projects

Tool  
Development

Technical  
Analysis

- ⇒ Product specific research to support country MEPS & labels development
- ⇒ Registration database research & development
- ⇒ Policy modelling tools
- ⇒ Street Lighting Tool supporting procurement
- ⇒ Technical analyses on ACs





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## Implementation & Training

Running Awards  
& Campaigns

Workshops

Trainings

- ⇒ SEAD Global Efficiency Awards & Medal
- ⇒ Global Lighting Challenge
- ⇒ AC Challenge in India
- ⇒ Incentives & MVE Workshops to support implementation of S&L program in South Africa
- ⇒ Training to support Indonesia S&L program



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## Dialogue & Collaboration

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Initiative  
Collaborations

Conferences

- ⇒ SPEx calls with SEAD and non-SEAD member countries and stakeholders
- ⇒ Formal Partnership with IEA 4E, with joint projects and participation in meetings
- ⇒ Presenting SEAD outputs at events, such as ACEEE, ECEEE, IEPPEC, and EEDAL



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# China and SEAD

In 2012

To benchmark China's test laboratory capacity against Australia, Europe, India and USA, CNIS and TIRT participated in the SEAD Global Efficiency Medal Competition round-robin testing for flat-panel TVs, supported by CLASP.

In 2014

The international winning product for the 2014 SEAD Global Efficiency Medal for motors was manufactured by Nanyang Explosion Protection Group (南阳防爆集团), represented by their products sold in Australia.

In 2015

A regional winner of the 2015 SEAD Global Efficiency Medal for lighting products was manufactured by Xiamen Yankon Energetic Lighting Company, Limited, represented by products sold in Europe and India.

December 2015

CNIS presented on QR code for China Energy Label at SEAD-IEA-IEA4E 21st Century S&L workshop in Paris.

CNIS has been participating in SEAD's International Steering Committee meetings.